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Guidelines for the development of programs for trainable mentally retarded children are presented. Major task areas identified are the family group, communication skills, physical development, socialization, recreational interests and skills, and preparation for work oriented activity. Six papers are presented: precision teaching and behavior modification at the Johnny Appleseed School, by James T. Austin; establishment of conference purposes and aims, by Leslie Brinegar; the Elementary Secondary Education Act of 1965, by Corinne Walker and by Ben Rice; the quality of programs for the moderately retarded, by Keith Stearns; and physical education for the retarded, by Dr. Robert Yoho. Appendixes describe classroom facilities, sources of funding, and service agencies, as well as list sources of instructional materials, programs, and 49 annotated references. (RK)

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IMPLEMENTING PROGRAMS
For Trainable Mentally Retarded Children

Indiana Department Of
Public Instruction

Richard D. Wells
Superintenden

EC003404E

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

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IMPLEMENTING PROGRAMS FOR TRAINABLE MENTALLY RETARDED CHILDREN

Prepared by a Committee
Attending a Workshop Sponsored by the
Indiana Department of Public Instruction
at
McCormick's Creek State Park
June 26-30, 1967

Supported by
P. L. 89-313

RICHARD D. WELLS, SUPERINTENDENT
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PREFACE

Providing an education for the citizens of the State of Indiana is a responsibility which encompasses an entire continuum of individual needs and abilities. Programming for trainable mentally retarded children has developed slowly, due primarily to a lack of insight into, and understanding of, the unique needs of the trainable mentally retarded.

The burden of responsibility for providing services has, in many instances, fallen upon private and residential school personnel. As the demand for services increases, these agencies will experience greater difficulty in meeting the personnel needs and operating costs for such programs. As a result, a need for greater cooperation between public and non-public school agencies appears evident.

The information in this publication is designed to present guidelines for the development of programs for the trainable mentally retarded in public schools, residential schools, community learning centers, and non-public schools.

Richard D. Wells, Superintendent
Indiana Department of Public Instruction

FOREWORD

This publication resulted from a workshop supported by P. L. 89-313 and conducted by Mr. Leslie Brinegar, Director, Division of Special Education and Mrs. Corinne Walker, ESEA Title III Coordinator, Federal Projects Division, Indiana Department of Public Instruction.

The purpose of this workshop was to develop objectives and guidelines for the establishment of programs for trainable mentally retarded children in the State of Indiana. Those in attendance were representative of public and non-public schools, P. L. 89-313 project centers, community learning centers, teacher training institutions, the Indiana Board of Health, the Indiana Department of Mental Health, and the Indiana Department of Public Instruction.

Included in this publication is a statement of the objectives for trainable mentally retarded children, descriptions of the broad general areas of the curriculum, and selected examples of methods for the development of effective learning experiences.

The material in this publication should be considered neither exhaustive in nature nor the sole means to an end. Program development at the local level, professional growth within the field, and greater insight into the needs of trainable mentally retarded children will necessitate revisions of, and additions to, this publication.

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INTRODUCTION

Education and training programs for the trainable mentally retarded have mushroomed within the last few years. This group of children has been referred to in the literature by various descriptive labels. The National Association for Retarded Children has referred to them as the semi-dependent retarded child. British educators and American physicians frequently use the term imbecile. The American Association on Mental Deficiency uses the term moderately mentally retarded. Many American educators tend to use the terms severely mentally retarded or trainable mentally retarded as synonymous terms. This report will use the term trainable mentally retarded (TMR).

Chapter 81 of the Indiana Acts of 1955 permits Indiana school corporations to provide special classes for the TMR group. These children are described in Rule S-1 of the Rules and Regulations of the Commission on General Education as children with intelligence quotients of approximately 35-55. In addition, programs for TMR are operated by parochial schools, private organizations, residential hospitals and training centers operated by the Department of Mental Health and local groups of interested individuals.

Through the concerted efforts of these groups about sixty (60) percent of these children are being provided with some type of service. The bulk of the children benefitting from these programs reside in Indiana's major metropolitan areas; children who are receiving none of these services are located in smaller and more isolated areas.

Due to the increasing impetus in the development of programs for the trainable mentally retarded two major responsibilities become evident. The present sixty (60) percent of eligible school age children currently being served by both public and non-public school programs must be increased. A significant amount of that service is being supported by private funds; i.e., United Funds, private donations, tuition by parents. It can be expected that such organizations will find it increasingly difficult to continue this support. State and local public facilities will receive increasingly large numbers of requests to provide services, not only to support present efforts more fully, but also to increase educational opportunities to such children not currently being served.

In the future, concerted community efforts will be needed to facilitate the development of comprehensive programs for the trainable mentally retarded. At the same time priority must be given to the development of tax supported public school programs for these children.

The guide will be presented in four major sections: (1) the objectives of education for the trainable mentally retarded child, (2) the broad general areas of the curriculum as related to the objectives, (3) selected examples of methods for the development of effective learning experiences and (4) an appendices including physical plant recommendations, sources of funds and agency assistance, and a bibliography of resource materials.

PURPOSES OF EDUCATION

Traditionally, American education has sought to provide all children with the opportunity to acquire knowledge and skills necessary for effective living. American education has been the most effective when it has been developed in terms of the real needs of children. In the context of this philosophy of education something is wanting in programs for the trainable mentally retarded child in the State of Indiana. To attack the problem of creating guidelines for the education of the trainable mentally retarded child is a presumptuous task. Mental retardation is a constantly changing phenomena. Nevertheless, some basic principles drawn from research and experience are available. The burden of this text is to present some of this knowledge.

Objectives must be stated which are consistent with the philosophy of American education. The primary objective of programs for the trainable mentally retarded child is to prepare the child for effective community living which includes employment and/or other meaningful activities within semi-independent situations. This objective presupposes that there are areas of physical, social and intellectual potentials which, if developed, lead to maximum achievement and increased personal independence.

Effective community living demands the direct teaching of skills which facilitate interpersonal communication. It further demands the direct teaching of skills which allow participation in leisure time activities that will contribute to participation in meaningful individual and group endeavors.

Parent education must be a point of focus for the establishment of objectives in the preparation of the trainable mentally retarded child for community living. The basic responsibility for the child's well-being rests with the family. Therefore, the parent must come to an understanding of mental retardation and its relationship to the development of the child. A necessary parallel objective is to assist the parents of the trainable mentally retarded child in their relationships with the child and to understand the child's relationship with the community and other members of the family.

In summary, the objectives of programs designed to educate the trainable mentally retarded child are:

1. To prepare the child for effective community living.
2. To develop independence in work oriented situations
3. To facilitate the development of the child's communication abilities
4. To prepare the child for meaningful leisure time activities
5. To help the parents understand and develop a meaningful role for their children
6. To prepare the child for productive employment in a sheltered environment

When working with individuals who have a basic impairment in dealing with symbols, the emphasis within ultimate program outcomes is upon the preparation of individuals who will have the needed competencies in order to function with maximum effectiveness. An effective program calls for movement away from the tradition of what has always happened in school, what teachers have always taught, and what parents expect. In the past, public education has not planned for the trainable mentally retarded child. Therefore, a bold, inventive program needs to be evolved based upon the needs of the mentally retarded child and within their levels of potential attainment. The objective stated here will obtain whether the program for the trainable mentally retarded consists of a single class in a rural community or as an operation of multiple classes in a comprehensive program in a metropolitan area.

These objectives impinge upon the self-worth and dignity of the child in the community of man. The self-image of the trainable mentally retarded child often depends upon his ability to perceive his reflection in the world around him. What is reflected there will determine his sense of belonging, his sense of self-importance, and his self-assurance. With this in mind, all the contacts made with the child in any area of education endeavor must enhance the child's sense of acceptance and well-being -- a child who is a contributing member in the community of men.

MAJOR TASK AREAS

This section does not establish the identified task areas as priorities but rather offers them as areas which research and experience have indicated as appropriate to the shaping of behavior and learning of trainable mentally retarded children.

The establishment of priorities in program planning is dependent upon the functional levels of individual children; i.e., children of similar chronological and mental age may need different curriculum stress due to different levels of development in critical areas such as behavioral readiness for group participation and language development or development of self-help skills. In implementing the educational program for children the teacher must be alert to the special abilities of each child and use these special abilities in developing areas of competence for the children.

I. The Family Group

The school based experiences for the trainable mentally retarded child can be effective only if there is a close relationship between school and home experiences for the child. The teacher must take responsibility for implementing such cooperation. At some times this will take the form of keeping the parents fully informed as to the short and long term curricular objectives for the child. At other times this will take the form of direct parent education with the goal of assisting the parents in the better understanding of the relationship of the development of the mentally retarded child to the entire family unit. Still at other times or concurrent with the other activities the teacher will need to assist the parents in the development of specific training methods for modifying the behavior of the child or for assisting the child in the development of new competencies.

II. Communication

The development of communication skills is the central aspect of the curriculum. The child's ability to communicate and relate with others in some meaningful way will determine his ability to profit from the school experience and will determine the extent of his adjustment in whatever environment he finds himself. For the purposes of this curriculum, outline communication has been conceptualized on the basis of a receptive-expressive language model; i.e., the ability to communicate with others and to be communicated with. In terms of practical development the processes are outlined below:

- A. Receptive (the ability to obtain meaning from what is seen or heard)
  - 1. Auditory (the ability to understand what is heard)
    - a. Relating action to verbal directions
    - b. Remembering what is heard
    - c. Discriminating what is heard
  - 2. Visual (the ability to understand what is seen)
    - a. Relating action to what is seen
    - b. Relating meaning to what is seen
    - c. Remembering what is seen
    - d. Interpreting simple visual symbols; i.e., signs, letters, etc.
- B. Expressive (the ability to express oneself meaningfully to others with words and/or gestures)
  - 1. Using gestures to make needs known
  - 2. Using words for meaningful purposes
  - 3. Using simple written symbols

III. Physical Development

The basic development of perceptual-motor coordination and muscular strength are essential elements of physical development. Even so, teachers who focus on perceptual-motor and/or coordination skills often omit the development of strength and stamina in fine and gross muscular development. These areas are significant as they are components of a basic foundation for much of the child's development in the areas of communication, social adjustment, and work-oriented activities. Suggested areas are:

A. Development of body-image
B. Development of gross motor coordination
C. Development of such areas as:
    1. Dominance
    2. Balance
    3. Laterality
    4. Directionality
D. Development of gross and fine muscular strength
E. Development of fine motor coordination
F. Development of perceptual-motor skills
G. Development and refinement of specific physical skill training in selected work-oriented areas
H. Practice of previous developed skills through programs of vigorous activity

IV. Socialization

Increased development of the child's socialization skills must begin as soon as he is placed with other children. Socialization is not only the act of "being with others" and interacting appropriately, but also includes those learned behaviors which prepare the individual for such interaction. Thus, in this task, socialization includes not only those skills directly involved in social interaction but also those behaviors and skills required for preparation to "interact".

A. Readiness to participate in group activities

B. Meaningful participation in group activities and team games

C. Self care - self help

D. Respect for the property of others

E. Development of self-esteem, worth, and identity

F. Awareness of community participation in daily living

G. Development and reinforcement of desire for participation with other individuals

V. Recreational Interests and Skills for the Individual

The trainable mentally retarded individual needs to learn to participate with groups and other individuals. In addition, it becomes evident that many hours of his life within the community will be spent in relative isolation in a sheltered living situation. Realistically, it is important that individual interests and skills in recreational areas should be stimulated and developed which the individual can use to provide more meaningful or active use of his leisure time.

A. Gardening

B. Crafts

C. Woodworking

D. Simple home maintenance

E. Pet care

F. Appreciation of music, sports, and crafts

VI. Preparation for Work-Oriented Activity

The ultimate aim, the purpose for most of our activity, and the significance of our programs to the trainable mentally retarded individual and his family must be that of eventual semi-independent community living. As such the culmination of such programs must focus intensely throughout the school-age years on the development of self-actualization goals which will bring each child to a level of productivity and sense of contribution within the community. The work of the individual in our society, while often only a means to another end, is a significant aspect of living. If the trainable mentally retarded individual is to live in a society where such emphasis is placed upon work, then he too must find a place. Thus, such planning for the individual must begin in early years. It is necessary to continually re-evaluate the abilities, skills, and interests of the individual. Such a re-evaluation will aid in the development of objectives best suited to a particular individual. At some point in early adolescence each child must be evaluated and a work-oriented program planned and initiated. The direction of the work-oriented program is dependent upon the abilities, aptitudes, and interests of the individual and the resources of his family and community. General areas which hold potential value for developing work-oriented programs and subsequent vocational placement include:

A. Domestic services
B. Building maintenance
C. Sheltered workshops
D. Landscaping
E. Food services
F. Personal services

G. Simple factory production tasks such as assembling, sorting, and packaging

H. Companionate role in the family

SUMMARY

These six major task areas have been presented to assist the individual teacher in her organization, planning and approach. Specific methods and skill areas in each task area must now be presented. It is here that the real work of the teacher will be accomplished. This particular pamphlet will not attempt to present the many methods and skill areas presently in use in various programs. Bibliographical materials and specific agency references will be included with some discussion of significant new or developed approaches to such areas as language development or behavior shaping.

METHODOLOGY

This section provides only embryonic materials which will be of use to the teacher of trainable mentally retarded children. Hopefully, as the number of trained teachers of the mentally retarded increase in the state, and as new methods and materials are developed and tested, more material will be available. Those who prepared this material view it as a document which will never be completed. As the nature of our society changes, the objectives and contents of programs for the mentally retarded must change to meet the task demands of society.

Following are six contributions provided by professionals working with trainable mentally retarded children and adults. The papers contributed here represent working documents outlining procedures which have been used successfully with mentally retarded children. The first paper "Precision Teaching" illustrates a central concept in the teaching of mentally retarded children; breaking the learning task down into small behavioral tasks and recording the results of instruction. In addition, the methods proposed in this paper may be used as the basis for a parent education program which will aid parents in the management of home related problems. The second paper, "Language Development Techniques", discusses a basic teacher strategy for working with children who have developmental problems in the area of language. Like precision teaching, this approach may be used by parents in their day-to-day dealings with children. In addition, the language development section contains a basic language lesson format, which with variations, may be used for an extended period of time with a rather heterogeneous group. The third paper presents some concepts relevant to motor development. The final two papers represent specific teaching-evaluation formats used to develop socialization skills. They are included, not for their specific worth, but for their value as illustrations of how two quite different tasks can be broken into fine sequential instructional steps.

Precision Teaching
as used at
Johnny Appleseed School & Training Center

A persistent and often critical problem in working with trainable mentally retarded individuals centers around changing behavior. Due to the inherent difficulty of communicating with these children, new methods other than verbally asking the individual trainable retarded child to change his behavior in question are necessary.

One approach which has shown great promise and is in daily use in several places in Indiana will be described. The name of this method is Precision Teaching. This technique has been used for a number of years and is gaining popularity throughout the country. Precision Teaching has been developed by Dr. Ogden Lindsley of the University of Kansas.

Precision Teaching is simple and easy to use. The average classroom teacher will have absolutely no difficulty in putting it into practice. A basic attitude which will make Precision Teaching more effective is contained in a quote from Dr. Lindsley which is "FIRST THINGS FIRST - ONE THING AT A TIME". Whenever it appears that Precision Teaching is failing, going back to the problem and applying this principle will usually get the teacher back on track.

Precision Teaching is simply:

1. PINPOINTING BEHAVIOR
2. RECORDING BEHAVIOR
3. MANIPULATING BEHAVIOR
4. TRY, TRY, AGAIN

These are the four simple steps to changing behavior. Behavior can be increased or decreased, or as the behavior scientists say, accelerated or decelerated. An example of an accelerated behavior might be improved production of speech. A decelerated behavior might be eliminating arm biting, thumb sucking, running in the halls, swearing, or screaming. Remember; in both accelerating and decelerating behavior "First Things First and One Think At A Time". Generally, only one specific behavior should be accelerated or decelerated at a time.

*Prepared by James T. Austin, Executive Director and Eugene H. Robb, Program Director

PINPOINT: This means to observe and decide which specific behavior is interfering with the child's or the group's progress. The major reason that teachers fail with this method is that they attempt to change more than one behavior at a time. In other words, they are not specific enough in pinpointing ONE behavior at a time.

Some poor examples of Pinpointing might be: sitting in a chair. The teacher has to decide how long it is reasonable for a child to remain sitting, what he is doing, and whether it is an appropriate time to be sitting. To pinpoint this behavior would mean that the teacher might decide she needs all children sitting during a story telling period. The only problem might be that the teacher on occasions might want the child moving around, i.e., acting out the story, and if she has conditioned some child to sit she would be working against herself and the child. A key question in pinpointing is to apply the "DEAD MAN'S TEST". In other words, is the behavior something a dead man could do? If it is, you have to be more specific. As you can see, having a child remain in his seat all day is something a "dead man" could do. It would be much better to pinpoint a behavior that the child is doing while he is sitting, such as thumb sucking, nose picking, masturbating, kicking, poor production of work, then decelerate or accelerate one of these specific behaviors or actions. Another quite different example might be in teaching a mongoloid child how to walk with a more normal gait and posture and avoid that which might be called the "mongoloid shuffle". The total walk cannot be changed at once. It must be broken down or pinpointed into a number of specific areas. These might be: 1) standing erect while he walks, 2) avoiding walking with toes too far out or too far in 3) to shorten or lengthen the stride, 4) rhythm. There are probably other components to walking which might be pinpointed further. But this is not the point of this example. What matters is that one very specific behavior is isolated or pinpointed and that behavior is then manipulated or changed. Remember, first things first, one thing at a time. Some other examples of behavior which have responded well to this approach have been; nail biting, thumb sucking, talking out, screaming, hitting, head banging, pushing, kicking, masturbating, licking lips, swearing, running when inappropriate, increased speech, responding to specific teacher requests or commands, i.e., "Mary, empty the waste basket", or "get your work out", Toilet training, and learning to take care of clothing needs.

RECORDING: One of the best ways to make Precision Teaching fail is to skip this stage, to be sloppy in the records you keep, or to refuse to pay attention to the records. RECORDING is easy, and, more importantly, it is essential. For example, a child is hitting. How often is the child hitting? Every 15 seconds? Once every 5 minutes? Once an hour? Twice a day? If we are going to attempt to manipulate or change this behavior by putting a consequence on it, then we have to have some fairly exact idea of its frequency. It is our feeling that this behavior should be recorded over at least 9 to 11 days. For reasons to be explained later, it is best to record behavior for an odd number of days. Recording behavior is simply counting the frequency with which the pinpointed behavior occurs. This can be done by simply marking on a piece of paper, although many teachers prefer to carry a counter of some sort on a belt or in a pocket. Ones we've used have been grocery store adders and golf stroke counters. Occasionally, you will record not only frequency but duration. Usually the standard classroom wall clock is accurate enough if this dimension is to be added, such as the number of times a child cries and the length of each cry. It is important that this behavior be recorded on some sort of a graph. We have found that 1/4 inch graph paper works well. A sample graph is included to help explain this process. It is important to stress that this is not time-consuming, or difficult. The question a teacher has to ask is not "Can I find the time to do this?", but, "Can I afford not to change this behavior?", using this method.

This graph represents one teacher's work on decelerating the hitting of a nine year old boy. This individual has been diagnosed on different occasions as schizophrenia retarded, brain damaged. What we're interested in with this child is not a diagnostic label, but decelerating his hitting and hyperactive behavior.

In construction of the graph the following points are basic, but essential and necessary.

Frequency or the number of times the behavior occurs is found vertically on the left side of the page. The number of sessions are found horizontally across the bottom of the page. In the case illustrated, it was necessary to use the whole 6-hour school day as one recording session. What really determines session time is the frequency at which the behavior occurs. For example, in this project "hitting" is being recorded, and it is possible that all the hitting took place within a one-hour period. If the teacher just happened to pick a one-hour session when none of the hitting occurred, she would not record behavior. But the reverse also can be true: hitting that occurs womewhat evenly throughout the day, or at an average frequency, could be recorded during any given hour during the day. In the case of the example used on the graph, the hitting took place spasmodically throughout the day so it was essential that the recording be done all day.

To record the behavior on the graph is a very simple operation. On the left side of the page - vertically - you find the number that would indicate the number of "hits" and from that point move in a horizontal direction until you find the point that intersects with session number (see graph). Example: this child "hit" 26 times during the fourth session, (see circled point on the graph.). Further, on the graph, you could find that on the 18th and 19th sessions, the child had slowed down to only three "hits". When you have completed a graph such as the example you will have an accurate and simple picture to offer as proof of the behavior change. It can become a record of the child's progress. In some schools this is posted in the hallway for all to see.

MANIPULATING: The specific behavior has been pinpointed, (some workers call it targeted), the behavior has been recorded for at least 9, but preferably 11 days, so we have a point from which to measure our progress. Now we have to establish a consequence or manipulate the behavior. It is important to remember that we are doing this in a scientific manner. We're not hostile, or angry at the child. We simply would like to help the child change a behavior which will enable him to function closer to his maximum ability. For instance, if a child is preoccupied with biting his arm it is going to be difficult to improve his language skills or social competency. Remove his habit of biting his arm and use this time to enlarge his vocabulary.

With retarded children there seem to be two devices which work very well for many behaviors that a teacher might want to decelerate. One is a mitten or glove, the other is a cotton gauze face mask with elastic replacing the cotton ties.

An example of hitting behavior manipulation would be to have the child put on a glove or mitten for five or ten minutes every time a hitting takes place. It is, for reasons we don't fully understand, best to have the child put on the glove or mask. It is important also that the teacher be calm and objective when this manipulating is going on. We are interested in changing behavior, not getting cross or angry at the children. Another way of manipulating this behavior might be having the child sit on a chair for five minutes. People unfamiliar with this method of precision teaching often ask before they've tried this method, "What do I do if the child won't put on a glove or mitten? What if the child won't sit on a chair?". The answer is that the child's world stops until he complies. We mean by world-stopping that all attentions or actions required of the individual stop. Research has demonstrated that the most stubborn children usually don't hold out more than two hours. Actual use of this will undoubtedly surprise most teachers in how quickly most children comply with the modification taught.

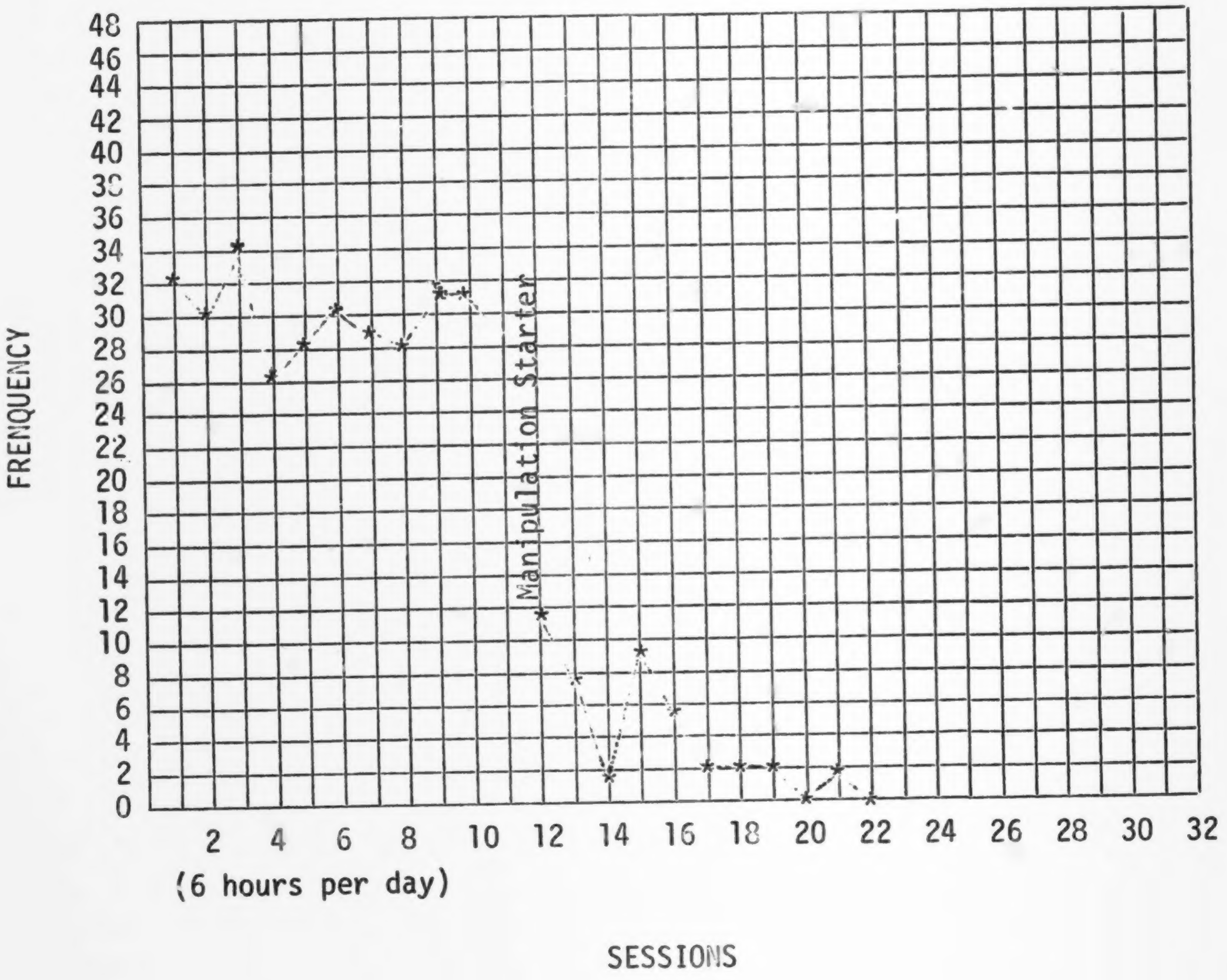
Manipulation depends a great deal on the teacher's own ingenuity with some simple guidelines. If you have a mouth problem, target on the mouth. If the feet are a problem, then the feet become the target; frisky hands, then target on the hands, etc.

Moderation is best in the reward and consequence area. If you mask a screaming child for 5 to 10 minutes, removing the mask is reward enough. If further reward is given, you will find the child screaming just to get the reward.

TRY, TRY, AGAIN: If you select a consequence or manipulative method and it does not work as recorded by your graph, then try again. If that doesn't work, try again. Research has demonstrated that 85% of all pinpointed behavior can be modified on the first try. Very essential in the total process of Precision Teaching is to continue manipulation until there is a positive slowing or speeding up of the behavior. It has been found many times that the technique would have become a failure if the teacher had not tried once more. After the manipulation has begun, usually there is an immediate and observable response in the first sessions. But just as common is an opposite and unfavorable reaction which might occur in the middle of your manipulation phase. It would be well to note this on the sample graph. The child had been reduced to two hits in the 14th session and in the 15th session increased to 9 hits. At this point the teacher had to try again by redoubling her efforts to decelerate the hitting, not stalemate the situation by trying to find the cause of the handicapping problems, as this will be useless information. Pinpoint yourself to the existing problem and try again.

As stated in the beginning, this method of teaching is in use many places and it does work. In conclusion, it should be stated also, if you have attempted this technique and you are still without success, TRY, TRY, AGAIN, and always remember....FIRST THINGS FIRST, ONE THING AT A TIME.

SUBJECT: John Doe PROJECT: Hitting



Language Development Techniques

Language development should be a key area for developmental focus for the teacher of the trainable mentally retarded. The child's ability to communicate with others and his ability to use language as a tool for developing new responses will, to a great extent, determine the effectiveness of any instructional program. This publication contains under the major task areas a simplified outline for the development of communication skills. However, if the teacher considers language development as narrowly as implied by that outline, then the program developed for the trainable mentally retarded child will be somewhat less than successful. A total program for the development of language should contain at least three elements, none of which may be omitted when considering the educational program for the trainable mentally retarded child. These elements are:

1. Formal periods of language instruction goals directed at improving specified communication skills for individual children
2. Correlation of the formal program with other school-based activities so that, in effect, all communication behavior of the child during the school day is treated as an instructional opportunity
3. And finally, but of equal importance, a home based program which provides parents with methods for improving communication behavior of children

A simplified outline of major areas to be included in the formal language program has been included in the previous section. In developing the formal aspects of the language curriculum, the teacher should attempt to develop a balanced program and should not fall prey to organizing her program around a core of those language behaviors with which the class already has adequate facility. This balanced program should serve to maintain areas of effective communication, while, at the same time, furthering the development of areas of inadequate communication behavior. One method of developing such a program is to develop basic lesson formats which have the capability of adaptation for use over a prolonged period of time, while, at the same time, being flexible enough to provide for various difficulty levels. Following is an example of an illustrative basic language lesson format.

Illustrative Language Lesson Format: Receptive - Expressive Skills

Basic Task	Alter Difficulty Level	
1. Array stimulus Materials before the group. Say, "Give me the (name of object)." With every correct response say with emphasis, "Yes. Its a (name of object)." With every incorrect response hold the object up and say while nodding with vigor, "It is not a____. Its a (name of object)." (Note: Rapid rhythmic pacing is essential. For a group of six to eight children this section should take two or three minutes.)	The difficulty level of the lesson may be controlled by controlling the types and quantity of stimulus materials. To lower the difficulty level: a. increase the stimulus value by using materials with the gross differences such as a 'ball' and a toy 'cow' as opposed to an 'orange' and a 'ball' or 'apple'. b. decrease the number of items in the array to decrease the visual decoding aspects of the task. To increase the difficulty level: a. increase the number of objects in the array. b. increase the similarity of the items in terms of form (i.e., several round objects) and/or class (i.e., all farm animals). c. increase the complexity of the verbal directions (i.e., use a qualifying adjective before the noun).	Snack time: While preparing to pour the juice say to the child, "Give me the cup." Use the standard feedback form. In the same way with the juice ask, "Is it juice? Yes. Its juice." Motor lessons: The same format may be used on the motor lessons. Avoid using the plural form when possible.
2. Retain only those objects which the group members have correctly decoded during part one. Hand the child an object while asking. "Is this a (name of object)?" "Yes, It's a (name of object)." In the case of incorrect responses supply the child with the correct response. Then follow with "What is it?" If the child responds "its a (name of object)", say "Yes. Its a (name of object)." If the child responds at anytime with a sentence fragment tell the child to say "Its a (name of object)." Follow this by having	To increase difficulty: a. the second stage of this process calls for the teacher to introduce some erroneous response, for example in picking up the ball the teacher might say, "Is this an egg?" One would hope that the children would 'catch' the error of the response but at this point the teacher should introduce the 'No' aspect of identification and in the absence of a response from the child follow with "No. Its not an egg. Its a ball."	Snack time: When giving children food items or cups use the basic identification statement. "Is this a (name of object)." Follow the child's response with the feedback "Yes. Its a (name of object)." Motor lessons: The parts of the body which the children draw should be identified using the basic identification statement.

the entire group repeat "Its a (name of object) with you."

3. The hiding game: Array all objects correctly labelled before the group. Mask objects or have the group members close their eyes. Remove one object. Then ask, "What's missing?" As the child responds display the object and say in the case of appropriate responses "Yes, Its a (name of object)." In the case of incorrect responses say, "Its not a (name of object). Its a (name of object)." Insist on complete sentences even if this necessitates having the child say after you, "Its a (name of object." This procedure may be varied by having the entire group guess what is missing in unison.
(Note: As in all language lessons of this type a rapid rhythmic presentation is important).

4. Following the 'hiding' game introduce this variation. Mask all of the objects which the children have previously decoded. Say, "Find the (name of object)." Then unmask the materials. If the correct response is not made select the requested object and say, "Its a (name of object)." Then have the group repeat the identification statement with you.

As suggested for activity number one the difficulty level may be controlled by altering or controlling the types and quantity of the stimulus materials.

In addition to the methods suggested under Task one the difficulty level of the task may be increased in the following ways:
a. delay the time interval between giving the verbal statement and unmasking the materials.
b. increase the length of the verbal statement in an appropriate way such as find the dog that barks and runs.

Walks and field trips: When the teacher is pointing out something to the chilren or a child during a walk use the basic identification statement and feedback form.

Music: Select three items which produce a distinctive sound such as a pea whistle, a triangle, and a bell. Sound them each for the group members saying after making the sounds, "Its a (name of object)." Then have group members turn backs and alternately sound each object. With each sound have the group turn around and select the appropriate object. Do not accept a pointing response.

The correlation of the formal lessons with all communications events must go beyond the level of correlated activities suggested by the illustrative lesson format. The teacher may enhance the formal language program by systematically concentrating on three types of teacher behavior: response elaboration, verbal definition, and verbal feedback.

Response elaboration may be viewed as a two-level procedure. The first level, labeling behavior, involves three steps. Step one requires that the teacher attempt to elicit only a simple verbal label for an object from the child. However, the teacher cannot be satisfied with only simple labeling behavior. Step two of the labeling process requires that the child extend his labeling behavior by identifying salient features of the object which he is labeling. The third step of this procedure requires that the child discriminate between similar objects on the basis of structural characteristics or discriminate between groups of apparently dissimilar objects on the basis of some common features.

The second level of response elaboration is related to the length and completeness of verbal responses. Through verbal feedback, direct questions, and supplying model responses, the teacher may build the child's response from single word responses to sentence fragments to complete sentences.

Verbal definition requires that the teacher supply the child with correct responses, talk through her own activities, and verbalize to children events which they are witnessing. This process assists the child in developing a recognition of the relationship between language and non-language events which occur in his environment. When verbal definition is coupled with an appropriate verbal response from the child, this aids the child, not only in the development of expressive language, but also aids the child in the development of meaning.

Tying the concepts of response elaboration and verbal definition together is the process of verbal feedback. Verbal feedback, the reproduction of the child's verbal response by the teacher in a syntactically complete form, serves to reinforce the child's response and serves to correct the child's response by providing an adequate model response. For example, during a labeling lesson if a child correctly labels an object by saying, it's a cup", the teacher provides positive feedback by repeating to the child, "Yes, it's a cup." This not only provides the child with information as to the adequacy of his response, but it serves to provide social reinforcement in terms of informing the child that what he says is important and being attended to by the adult. If the child should incorrectly label the cup by calling the cup "glass", the teacher may supply the correct information by saying to the child, "It's a cup. It's not a glass. It's a cup. Say, It's a cup." This not only supplies the child with the correct label but it also supplies the model of the syntactically complete response and is coupled with a demand for production of a vocal response by the child.

This procedure requires that the teacher organize a portion of the days' instructional activities around a structured core of language development experiences. It also demands that the teacher treat each language event between child and teacher as an instructional event and consistently employ the techniques of response elaboration, verbal definition, and verbal feedback to further the development of communication skills.

In terms of the home-based program, it becomes the responsibility of the teacher to communicate to the parent the aims and objectives of the language development curriculum. It becomes meaningless to attempt to extend the child's range of vocal responses at school if the same child can achieve his own objectives in the home through non-vocal means. Realistically, at a minimum, the teacher should be able to help most parents in developing skill in using verbal definition and verbal feedback as tools for approaching communication events between parent and retarded child in the home.

Motor Development

Where a perceptual motor development program becomes a routine part of training for the mentally retarded to increase their ability to gain satisfying experiences, several concepts must be considered. This is a list of basic considerations around which a program may be designed. Ultimately, these become the foundation of adequate self-organization and one of the keys to meaningful experience for the child.

1. BASIC ABILITY - In muscular activity, this means strength. In vision, it means the ability to pass an ordinary visual examination. In hearing, it means passing an audiometer test. A child can't be expected to perform when the tools of movement and perception are not present.
2. DEXTERITY - A motor or perceptual task should go beyond a successful performance that indicates basic ability. Ease of performance modified by gracefulness and smoothness is a qualitative aim. This allows, to some extent, the motor or perceptual process to occur more or less automatically so that the child does not have to invest a great amount of attention to a basic skill.

3. INTEGRATION - Of basic importance is the ability of one perceptual and/or motor process to occur with another. Both sides of the body should be able to function together without one side leading or pulling the other (as in "sit-ups"); the top part of the body should be able to work smoothly with the bottom part (as the swing of the arms when marching). Equally important is the ability to see and move at the same time; to hear and move, to move and speak.

4. DIFFERENTIATION - A given motor or perceptual process should be able to occur without interference from similar processes. A child should be able to move one limb without the other joining in if he chooses. A visual image should stand out from surrounding stimuli when attention is given to the image. A given sound should be distinguishable from competing sounds.

A teacher of trainable mentally retarded children cannot take these abilities for granted. Part of every day's program should include developmental tasks which enhance a child's ability to move and act with the above qualities of performance.

There are two other factors that should be considered in developing perceptual-motor skills. One is variety. At any given level of performance there are many activities that can focus on one aspect. Repetition need not be tedious to the children where a teacher's sense of "fun-and-games" is creatively employed.

The second factor is sequencing. Optimal training occurs when the child is ready for it. Body processes develop in sequence. Training should occur that betrays an awareness of sequential development of abilities. Gross motor activities occur before refined activities. Motor development comes first.

Then connections are established between motor abilities and visual-auditory processes. Finally, visual and auditory activities begin to function more independently. If it takes too long for a teacher to obtain a desired performance, the activity must be broken down into simpler components or a simpler activity employed. Generally speaking, all activities, if properly designed, should produce improvement with each attempt if there is no genuine fatigue or emotional interfence.

Socialization

Frequently teachers of the trainable mentally retarded child prepare lessons carefully and upon presentation of them find that they seem to be ineffective in developing the desired skill. Frequently, when one analyzes such lessons, the cause of failure reflects upon the inability of the teacher to break the learning task into simple enough steps. The following two formats both developed in the area of socialization, represent attempts by teachers of the trainable mentally retarded to break a specified task into simple instructional sets. The first format, "Learning to Count Money", was prepared by Miss Carolyn Sieburn, during a practicum training period at Stonebelt Community Center. The second format, "Brushing Teeth", was developed as a teaching evaluation format at the University School class for the trainable mentally retarded at Indiana University. Both formats have a close relationship to the general procedures described by Austin and Robb in the material titled "Precision Teaching".

Learning to Count Money

I. Steps In Learning to Count Money

1. Recognition of the penny as distinguished from other coins.
2. Work on the concepts of "more and less" using groups of pennies. At this stage, work need involve only comparisons of groups of "1", "2", and "3" to determine "more and less". Ability to visually recognize that the set of 3 has more than the set of 1 or the set of 2 is more important than actual counting at this stage.
3. Learning the concept of 1 penny - visual recognition and ability to choose 1 on request.
4. Learning the concept of 2 pennies - ability to choose 2 on request.
5. Distinguishing between sets of 1 penny and sets of 2 pennies by both visual discrimination and counting.
6. Learning the concept of 3 pennies - ability to choose 3 pennies on request.
7. Distinguishing between sets of 3 pennies and 1 penny both visually and through counting.
8. Distinguishing between sets of 3 pennies and 2 pennies through both visual and counting methods.
9. Learning the concept of 4 pennies - ability to choose 4 on request.
10. Distinguishing between sets of 4 pennies and 1 penny.

11. Distinguishing between sets of 4 pennies and 2 pennies.
12. Distinguishing between sets of 4 pennies and 3 pennies.
13. Learning the concept of 5 pennies - ability to choose 5 pennies on request.
14. Distinguishing between 5 pennies and 1 penny.
15. Distinguishing between 5 pennies and 2 pennies.
16. Distinguishing between 5 pennies and 3 pennies.
17. Distinguishing between 5 pennies and 4 pennies.
18. Visual recognition of the nickel as distinguished from the penny.
19. Learning the concept that a nickel is worth more than a penny.
20. Learning the concept that a nickel is the same as 5 pennies.
21. Visual recognition of the dime as distinguished from the penny.
22. Visual recognition of the dime as distinguished from the nickel.
23. Learning the concept that a dime is worth more than a penny.
24. Learning the concept that a dime is worth more than a nickel.
25. Learning that a dime is the same as 2 nickels.
26. Learning that a dime is the same as 10 pennies.

II. Suggested Activities

1. Card Game - to develop the concepts of "more and less" when comparing various amounts of money.

   Materials - Tape coins to one side of plain white index cards with scotch tape. Put differing amounts of money on the different cards.

   Procedure - Place the cards on the table with the money side down. Have the student draw one card and tell how much money is on it, three pennies for example. Next, the teacher should draw a card and have the student tell how much money is on it. Last of all, the student should tell if his card or the teacher's card has more money on it. The one whose card has more money on it wins and gets to keep both cards. The game ends when all cards have been drawn in this manner. The teacher should provide success experiences for the student by arranging the cards in order that he may win most of the games.

2. Arrange situations in which the student is given money with which to buy various items from the teacher. For example, the student can buy mints at 2¢ each. If he hands the teacher the correct amount, he is given the mint.

3. Practice on visual discrimination to aid the visual discrimination the student must have in dealing with coins.

   a. Compare two circles of various sizes or colors by having the student tell in which ways they differ.

   b. Display three circles which are alike and one shich differs in some way. Have the student tell which one is different and how it differs.

   c. Have the student look carefully at each coin to see what distinguishing characteristics it has. For example, the color or what is pictured on the coin should be noted.

Marking System:

I = Independent: Child is independent in the observed activity. He may need to be told to initiate the activity but does not need reminders as to sequence of steps or how to complete specific steps of the activity.

SI = Semi-Independent: Child is able to complete the activity but needs verbal directions to complete the activity adequately.

SD = Semi-Dependent: Child needs supplementary help in addition to verbal directions in completing the activity.

D = Dependent: The child needs active assistance from another person to complete the activity. This may take the form of assisting the child in manipulating objects used in the activity or it may take other forms such as the use of concrete reinforcers to sustain the activity.

	Observations									
	1	2	3	4	5	6	7	8	9	10
1. The child is able to select his own toothbrush from the rack.										
2. The toothbrush is rinsed in water before applying toothpaste.										
3. The child is able to remove the cap from the toothpaste.										
4. The child is able to squeeze and apply an appropriate amount of toothpaste on the toothbrush.										
a. tube is squeezed from the bottom										
b. paste is not dropped on floor or washbowl										
5. The child is able to replace the cap on the toothpaste tube.										
6. The child brushes adequately.										
a. bottom teeth are brushed "up" and uppers are brushed "down"										
b. attention is given to crowns, molars and all teeth surfaces and not just to the front teeth										
7. After brushing the child rinses his mouth with water.										
a. rings of toothpaste are not left on the mouth or lips										
8. The child cleans his toothbrush.										
9. The child cleans the sink area after brushing.										
10. The child returns the toothbrush and paste to its proper place.										

ESTABLISHMENT OF CONFERENCE PURPOSES AND AIMS

Mr. Leslie Brinegar, Director
Division of Special Education
Indiana Department of Public Instruction

The main purpose of this meeting was to bring together a representative group of people from the "community learning centers", public school programs for the trainable, and residential training centers, to compile information which can be put together in one central publication for dissemination to the state concerning a complete range of services and programming for the TMR. We would like to see as an outcome of this conference, a proceedings or a report put together which may represent a statement of philosophy in regard to programs for the trainable. Such a report should include a tentative, brief breakdown of the range or continuum of services that TMR children and young adults should be provided. A section should be included which will define the responsibilities of the various agencies dealing with the TMR such as what is the responsibility of the public schools? What are the responsibilities of the Department of Mental Health, the Division on Mental Retardation? What are the responsibilities of other groups, agencies and organizations who deal with some aspect of the trainable. Then a section on the sources of funding programs for the TMR. What are the mechanics and procedures for obtaining money from county tax funds? What funds are available from the Indiana Department of Public Instruction? What would public school corporations get in reimbursements if they had TMR children in special education and what would they receive in the form of regular reimbursement? How does one go about applying for and receiving funds through P.L. 89-313? We need to have information available on a state-wide basis in some publication on how to establish and operate programs. Each one of us from time to time receives calls from people in various parts of the state for information in regard to establishing sheltered workshops. We need to have something available which, in brief digest form, gives people these kinds of information.

During this workshop, we need to think seriously about qualifications of personnel to teach TMR children as well as qualifications of other personnel who deal with the trainable, such as principals of schools, matrons, and teachers' aides. We need to consider eligibility of pupils, admission procedures, child assessment needs, housing, kinds of buildings, how much space is needed, and grouping of children. While we are unlikely to answer all of these they, never-the-less, are issues that need deliberation. Let us attempt to put the resulting information together in organized form which will be published and made available to those persons and organizations in the state who are in need of it.

Finally, let us consider the goals of education and training for the TMR and initiate at least in tentative form basic guidelines for use by teachers in the structuring of school programs which meet the special needs of the trainable child and young adult.

THE ELEMENTARY-SECONDARY EDUCATION ACT OF 1965

Mrs. Corinne Walker, ESEA Title III Coordinator
Federal Projects Division
Indiana Department of Public Instruction

American communities were given an unprecedented opportunity to improve the quantity and quality of education through the Elementary-Secondary Education Act, or ESEA, when it was passed in 1965.

In the past when educators needed help or assistance, seldom did they think of contacting the Department of Public Instruction. For long years, departments of public instruction throughout the United States had not been able to pay salaries which would invite or would keep employees. Therefore, Title V of ESEA is to strengthen and to improve the effectiveness of the state departments of education. These funds can be used to support such improvements as educational planning on a statewide basis, the identification of educational problems and needs, the evaluation of educational programs and the formulation of long range plans, and the improvement of teacher preparation.

Title IV authorizes the establishment of a series of national and regional educational laboratories to support programs for improved dissemination of research results, authorizes the training of research personnel, and provides for a more rapid return of research findings to the classroom teacher in readily usable form.

Title III provides for the establishment of supplementary educational centers and services whereby several school corporations can join together to provide services, personnel and risk money not normally available to most schools. A provision for the development of innovative and exemplary ideas to serve as models for regular school programs is included also. One hundred and fifty proposals have been submitted by Indiana school corporations, and forty-six of these have been funded involving approximately five million dollars. Personnel with the United States Office of Education has final authority over the funding and running of these programs. The State Department of Public Instruction is charged to review and to make recommendations to USOE on the Title III projects which are submitted.

Title II is to make available for all school children library resources and other printed and published instructional materials. There has been an increase statewide in library services through assistance from this title, and there are numberous instances of cooperation among all of these titles. For instance, the materials for the library can be purchased under Title II, and yet Title I can be used to provide the personnel and equipment needed to make a library program more valuable and to meet the needs of the educationally disadvantaged children.

Title I received the highest funding in the Elementary-Secondary Education Act and is to provide assistance for the children who are educationally disadvantaged. Believing there is a correlation between the low economic level of a family and the educational deprivation of children, the 1960 census tract was used to determine the number of children from low income families. This information is used as the basis on which allocations are made to the different school corporation in the state. It has been found that these disadvantaged families usually are concentrated, target areas are designated, and school personnel are encouraged to establish, to expand and to improve special programs to meet the needs of all educationally disadvantaged children within the area.

There has been almost one hundred percent participation by Indiana school corporations in Title I. In addition, there has been a "spin-off" affect whereby not only the children who were from low income families but youngsters from other economic strata have been able to mend their educational deficiencies.

Minor problems have existed, and there has been a minimum amount of duplication; but the authors and administrators of ESEA are to be complimented. We, as educators, have been trained to give general aid and as educators have had to make adjustments and to be innovative in trying to meet the needs of the disadvantaged child. Some school corporations are starved for equipment, and yet the services and personal attention are long neglected needs of these children.

Very soon additional groups of children who were disadvantaged also, were found to have been omitted from the law. Thus, Public Law 89-313 became an extension of the act offering financial assistance for the development of programs for the handicapped, the blind, the deaf and the mentally retarded who are in state residential or state supported schools. It is through this law that programs were developed in the Indiana School for the Blind, the Indiana School for the Deaf, nine state mental hospitals and in the community learning centers.

Orphans such as the children who live in the Soldiers' and Sailors' Childrens' Home in Knightstown and in orphanages throughout the state are included in the amendments which were passed. Provisions are made for delinquents in the Indiana Girls School and the Indiana Boys School as well as for those throughout the state in institutions for delinquents. In addition, the migrant children of the migrant agricultural workers are counted now. A bureau for the Handicapped is to be funded and to become Title VI via of the amendments.

Observing the programs under these titles is exciting for they show the ingenuity which has been used by Hoosier educators to meet the needs of the educationally disadvantaged children. It is from the assistance of the Elementary-Secondary Education Act that we at this time are able to meet and to discuss the standards, to prepare guidelines and to share ideas which will improve the educational opportunities of Hoosier trainable mentally retarded children--those who are being served by your work in community learning centers, public schools and the state hospitals for the mentally ill.

THE ELEMENTARY-SECONDARY EDUCATION ACT OF 1965

Mr. Ben Rice, ESEA Title I Coordinator
Federal Projects Division
Indiana Department of Public Instruction

It is indeed a pleasure to meet with a group of people such as you, who are truly interested in the development of educational programs for children who are severely disadvantaged.

Mrs. Walker indicated that I have just completed two years as Director of Title I for the State of Indiana. These were the first two years in the history of the program. These two years have truly been years of decision. First of all, the Act had to be interpreted work for work, sentence for sentence, paragraph for paragraph, and Title for Title. This was accomplished through many thinking sessions, many discussions, many "bull sessions", brainstorming, and consulting with Congressmen, educators, and the U. S. Office of Education.

The procedure which school people were expected to follow in preparation for Title I was to complete a needs assessment of the disadvantaged, establish starting points, develop objectives, apply for funds, locate personnel, conduct programs and then evaluate. Educators were continually encouraged to search for and develop new techniques of teaching to satisfy the needs of the disadvantaged. It was stressed that equal educational opportunities for children does not mean giving each child the same educational experience. In most cases, this meant adding new programs. Some schools felt it necessary to attempt to change the attitude of teachers to accomplish the objectives.

When Public Law 89-313 was passed and funded, the State Title I Office and the U. S. Office of Education were again presented with a problem of initiating a new program. The Act had to be interpreted and guidelines established. The guidelines stated that "an institution, to be eligible for these funds, must be recognized by the state as offering elementary or secondary education". Does the phrase "recognized by the state" mean the State Department of Public Instruction, the

General Assembly, the State Board of Health, the Department of Mental Health, or the State Board of Correction? What is meant by elementary or secondary education? Must the program be offered by a public school? Must the programs have certified teachers? Must the program lead toward eventual graduation? You see many questions had to be answered. Again after much thinking, brainstorming, and the sharing of ideas with many people, decisions were made.

Some Community Learning Centers receiving grants from the State Department of Mental Health were finally approved as being eligible to participate in P.L. 89-313. Some institutions were excluded from participating because it was felt certain programs were not in the nature of elementary or secondary education.

There still remained the question in some people's minds as to whether these Community Learning Centers were eligible because the State Agency which, supposedly, has direct control over the Centers is somewhat of a limbo status and some people questioned whether the educational programs should be officially recognized as elementary or secondary education.

It must be pointed out quickly that the State Title I Office and the Special Education Division of the State Department of Public Instruction were very pleased that the Community Learning Centers were eligible to participate in P.L. 89-313. However, they did feel an obligation to work with the Centers in the development of their programs so that the educational programs in the Centers could be improved as a result of the use of these funds. This would serve a two-fold purpose, i.e., better programs for the disadvantaged and justification that these programs could, in fact, be recognized as elementary or secondary education.

It was decided that an approach to this task would be to call a working workshop to establish a starting point and develop some goals. We hope that in this workshop you might assess the programs of the Centers in terms of what you have done in the past, where you are today, where and how fast you might realistically move in the development of better educational programs. We wish to emphasize that the goals which you establish must be within reason and achievable. At all times, keep the children in mind. This is the target population we are most vitally concerned with. Don't cheat or neglect the child.

We ask your assistance in the development of this program so that the good things coming from this workshop may be adopted in planning for other, like kind of educational programs which may be developed in the future. Here I have reference to the newly passed Title VI of P.L. 89-10 and the possibility of the General Assembly mandating local schools to assume special education programs. We hope you will be able to suggest ways of helping to satisfy the manpower shortage we experience in staffing such programs.

Some of you people will be here at the workshop only a couple of days while others will stay another three days organizing and reshaping ideas presented in the workshop to establish guidelines for further action. I hope you have very successful meetings and a challenge to develop better educational programs for the target children.

PROGRAMS FOR THE MODERATELY RETARDED: EDUCATIONAL OR CUSTODIAL?

Keith E. Stearns, Ed. D.
Assistant Professor of Education
Indiana University

When I took this assignment I was pessimistic. Pessimistic because there are so few programs in the State of Indiana which actually provide a continuum of services for the mentally retarded, pessimistic because so many educators, including special educators, have little interest in terms of improving the quality of additional services needed for the moderately mentally retarded but also the urgent need to improve the quality of services offered. However, the time has come when one may begin to replace the negative examples cited with some positive developments. For example, this meeting in all probability would not have occurred five years ago. It would have been difficult to gather together this number of professional special educators interested in the education of the moderately mentally retarded child from the entire state. Today, at Indiana University, students elect to do their student teaching with children who are moderately mentally retarded. As recently as 1964, such a professional objective was met with such negative attitudes as to make this type of selection untenable. Perhaps the most encouraging trend is the programmatic development and construction of community centers to serve pre-school, school age, and adults who are mentally retarded. The community center program is of particular significance because it fills a gap in programming which can never be filled by public education as it is now organized.

Public schools in the State of Indiana have failed to provide a continuum of services for the school age individual who is mentally retarded. In most communities the failure to provide an adequate continuum of services for the mentally retarded can be isolated to any one of or all of five major omissions. First, some districts have provided services for one group of mentally retarded children and failed to provide services for a second group. That is, they have provided servic for the educable mentally retarded but not for the trainable mentally retarded, or they have provided services for the trainable and not the educable. Second, the programs as they have been developed suffer from sequential 'gaposes'. That is, a program may be provided from the primary and intermediate age group with no program being provided for the adolescent age group. Third, educators have all to frequently failed to coordinate their efforts with other community services and agencies also serving the mentally retarded. Fourth, programs of diagnosis and identification of the mentally retarded have tended to focus on quantitative aspects of mental retardation rather than on the generation of qualitative and educationally relevant aspects. And fifth, in addition to the above problems, educational programs for the mentally retarded have been further limited by an organizational format which is based upon traditional age level plans and utilizes admission criteria which may serve to eliminate children who would be effectively served by such programs. Perhaps, as a result of this we might be able to avoid the mistakes of the past.

As one reviews the results of which have attempted to evaluate the effectiveness of special classes for the moderately mentally retarded one factor predominates. The bulk of the evidence indicates that special classes for the moderately mentally retarded have not been successful in terms of producing measurable behavioral changes. One cannot demonstrate that, in fact, such classes have served as anything other than parent relief programs. The focal point of failure of such classes is apparently related to the failure of the professional special educator to develop adequate goal-directed curriculum outlines, and then to provide adequately trained teachers to implement such a curriculum plan.

In 1953 as a result of legislative action by the Illinois General Assembly, Goldstein (1956) initiated a two year study of special classes for the trainable mentally retarded in the state. The Goldstein report was based upon a sample of 175 children enrolled in 22 classes with 24 teachers during the first year of the study and 125 children during the second year of the study. On the basis of a behavior check list developed for the study, Goldstein concluded that the greatest gains were made during the first year of the school program with only minimal progress being demonstrated the second year. The most positive information to be generated by this study was the indication that parents bacame more realistic about the abilities and disabilities of their children. However, even the meaning of this information is obscure as 'being more realistic' in terms of this study means that the parents came to view their children in ways similar to the ways in which the teachers viewed the children. The program may have been professionally unsatisfactory to the teachers involved as the attrition rate among the teachers approached 50 percent for the two years.

A second frequently cited study is the Tennessee study reported by Hottle. Hottle studied 21 matched pairs of children over a period of an academic year. At the end of the year there were no differences between the control (out-of-school) group and the experimental (in-school) group which could be attributed to the school experience. Variables studied included mental age, social age, behavioral skills and home adjustment. Despite various design and instrumentation problems one cannot demonstrate that the educational program provided for the trainable mentally retarded children studied had any significant impact. However, in view of observer comments that the majority of the school day was devoted to such non-instructional activities as rest periods, recesses, and free activities, one might have predicted this result.

The major effectiveness study of this decade is the Cain-Levine study reported in 1961. In developing the design for this study Cain and Levine attempted to eliminate some of the major methodological defects of the previous studies. The sample of children included was larger (N-182) and more carefully selected. Of the 31 teachers participating in the study 27 possessed a regular certificate for teaching the mentally retarded and four were provisionally certified. Thus giving rest to the criticism that the teachers involved in the previous studies were largely untrained. A special instrument, the Cain-Levine Social Competency Scale, was developed to insure that the criterion measure was generated through the use of a structured classroom observation scale.

For the purposes of this study, four groups of moderately mentally retarded children were identified. The groups were the group living at home and attending school in the community (community experimental), the group living at home and not attending school in the community (community control), the group living in a state institution and attending school in the institution (institutional experimental), and the group living in the institution and not attending school (institutional control).

The primary assessment of the effectiveness of the school program was made through comparison of pre-to post-test increases in social competence over the two year period of the study. Again it should be stated that the content of the evaluation tool, The Cain-Levine Social Competency Scale, was consistent with the teachers' stated objectives for their classes. During the period of the study there was a significant increase in the social competency scores for both the school attending and the non-school attending community groups. However, as there was no significant difference between the increases in social competency scores between the community experiment and community control groups this change cannot be attributed to the effect of the school based program. The findings for the institutional group are even more dismal. During the two year period both the school attending and the non-school attending institutional groups decreased in total social competency scores. As in the community results the difference in change scores between the institutional experimental and control groups was not significant. Apparently the institutional school program was not effective in terms of maintaining or developing social competency skills.

The literature relevant to the education of the moderately retarded indicates that the development of social competence is the major educational objective of school programs. The teachers involved in teaching the moderately mentally retarded children in the Cain-Levine study held the development of social competency as their major stated educational objective. One must ask the question, "Why did the school program fail to influence the development of social competence?"

The major responsibility for the failure of the school program may be related to the way in which teachers used their time. Table One presents the results of thirty-one classroom observations conducted by Cain and Levine and their associates. If this observational data is representative of how teachers use their time throughout the school year, then it is apparent that slightly less than 10 percent of the school day was allocated to instructional activities related to the development of social competence. In other words, the typical teacher in this study teaching approximately a 210 minute school day devoted less than 21 minutes per school day to activities which were clearly related to their major educational objective, the development of social competence. The remaining portion of the school day was composed of instructional activities of a general nature (approximately 34 per cent) and non-instructional periods (approximately 56 per cent). Of this hypothetical 21 minutes only half or approximately 11 minutes met a liberal criteria of being adequate instruction.

TABLE I

PERCENTAGE OF TIME DEVOTED TO EACH TIME PERIOD BASED ON THIRTY-ONE CLASSROOM OBSERVATIONS*

Time Period	Inst. - S. C.		Inst. - Gen.		Non-inst.	Total
	Low	High	Low	High		
Outdoor Recess					19.2	19.2
Indoor Free Activity					17.2	17.2
Lunch	1.9	2.5			6.9	11.3
Music			5.3	3.3		8.6
Arts & Crafts			5.1	3.3		8.4
Rest					6.6	6.6
Opening Exercise	.1		2.8	.9	.2	4.0
Identification	.1		1.5	2.0		3.6
Oral Activities	.6	.7	1.7	.6		3.6
Toilet Routine	.8	.7			1.0	2.5
Snack Time		.2			2.3	2.5
Story Time			.7	1.5		2.2
Indoor Organized Games					1.8	1.8
Outdoor Organized Games			.2	1.5		1.7
Health	.9		.4		.3	1.6
Preparation & Clean-up	.3	.4	.2	.1	.5	1.5
Reading			.6	.6		1.2
Numbers			.4	.7		1.1
Nature Study			.5		.3	.8
Safety	.1	.4				.5
Total	4.8	4.9	19.4	14.5	56.3	99.9

*Cain and Levine, 1963, p. 35.

Closely related to the use of time was the quality of instruction. Inspection of Table One indicates that slightly less than one-half of all instructional time was rated as being instruction of a high adequate nature. To put this data in its proper framework it is necessary to review the criteria which Cain and Levine used to rate instructional time and the adequacy of the instructional time. Cain and Levine (1961, p. 116-117) defined instructional time periods ".... as those periods in which an identifiable effort was made to increase the children's competence under the direction of the teacher." Lessons were rated as 'high adequacy' lessons if the following components were included:

> materials easily accessible and sufficient for conducting the activity; high degree of teacher supervision with individualized attention in evidence; most or all of the students engaged in the activity...; differentiation among the children's ability levels...; opportunities provided for assuming responsibilities provided by the teacher; general and specific evaluative statements of the children's work made by the teacher or by the teacher eliciting evaluation statements from the children; deviant or distracting behavior handled by the teacher with minimal interference with the ongoing activity (p. 117).

Low adequacy lessons were defined by criteria which essentially represented the opposite of the above criteria.

One must admit that the criteria employed are modest criteria. In other words, has the teacher done enough pre-planning so that she at least has the appropriate materials available? Does the teacher provide some feedback to the learner relevant to the adequacy of their responses? Does the teacher plan for and accomodate individual differences within her instructional groups?

The title of this talk was "Education for the Moderately Mentally Retarded-Educational or Custodial?" The nature of educational programs for the moderately mentally retarded rests with the teachers, those who supervise them, those who train them, and those parents who unquestioningly accept whatever is provided. Too many educators and too many parents in their zeal to start new programs, to provide services for those who are not served, are lulled into thinking that a program is having a class, or having a teacher in a teaching station. This is the beginning. The program is what happens to the children once the service is provided. The teachers' observed for the Cain-Levine study apparently viewed their role as a custodial type role. Nearly fifty percent of the school day was used by activities (outdoor recess, indoor free activity, lunch, and rest) for which no instructional component had been planned.

Table One provides a fairly adequate description of the categorical assignment of time during the day. However, Table One does not indicate the type of problems found in determining the adequacy of instruction. Based on the examples provided in the study and considerable classroom observation, it may be concluded that the major instructional problems fall into the areas of handling deviant behavior, evaluating the child's products, and providing for individual differences.

First, one must recognize that in any instructional group a certain amount of deviant behavior will occur. The teacher's problem is first to minimize the occurrence of deviant behavior, and second to handle such behavior when it occurs in such a manner that it does not disrupt the ongoing program or the involved child. While it is popular among educators to discuss prevention in terms of adequate planning and preparation at the time deviant behavior occurs, the discussion is of no assistance. All too frequently the Cain-Levine observers indicated that deviant behavior was allowed to change the nature of the lesson into a period which centered on attempting to control the deviant behavior.

The second problem is one of evaluating the learner's products. As an absolute minimum the learner must receive feedback from the teacher. This feedback is essential to the learning process as it serves to inform the learner as to the adequacy of his response, provides a form of social reinforcement, and may provide a model on which to build future responses. Again the observation illustrations reported by Cain and Levine and classroom observation tends to indicate that too frequently the teacher is oblivious to the learner's response.

In terms of providing for individual differences, the teachers' left something to be desired. Cain and Levine observed a phenomenon which I have observed and I am sure others have observed. That is the teacher of the moderately mentally retarded conducting a low adequate lesson often allowed participation by only a select group in the class. She did the thing for which regular class teachers have been criticized by special educators for many years. She taught to the highly responsive group and ignored or did not allow the low vocalizers or the low performing group an opportunity to participate. This ignored group assured their place in class by being quiet, docile sitters. This behavior is best summed up by the response of a trained experienced teacher of the moderately mentally retarded. When asked why materials were not provided to a certain child during the previous two instruction periods the teacher responded, "He's a low functional. He needs individual help."

In view of the data present one must ask the question, "In what way do teachers view the curriculum and the objectives of education for children who are moderately mentally retarded?" Do they conceive their task as that of the educator of trying to move the learners from point _a_ to point _b_ along some continuum which has a terminal objective? Or do the teachers view their task as primarily a custodial task which has, at best some minimal educational implications; a custodial task designed to provide parent relief and one which is conducted in such a way so that the central administration is happy. Or, perhaps, do they view their work as a curriculum based on a happiness concept; a concept which implies that mentally retarded children have been so adversely treated that task demands should be limited and the teacher should provide a protected environment in which the retarded learner must first and foremost be kept happy.

If the teachers have a limited view of the objectives of education for the mentally retarded, if the teachers cannot develop and implement an adequate lesson it is not because they don't try. Largely it is because they have not been trained adequately and then, once placed in the field, have not been given adequate support.

At a minimum, as a result of this meeting, we should be able to provide the teacher in the field with some tentative curricular guidelines. Guidelines which attempt to answer the question or purpose, content and sequence for the education of the moderately mentally retarded.

As a beginning to our group discussions the following general statement of purpose is proposed. The purpose of educational programs for the mentally retarded like programs for the non-retarded learner is to increase the ability of the individual to function in whatever environment he finds himself. If you wish, some have translated this into slightly different terms for the moderately mentally retarded and restate the terminal objective as "reducing the dependency of the individual upon others in whatever kind of environment he happens to live." The main difficulty with this type of statement is that it becomes to readily translated into a curriculum organized around self-help skills. That is a curriculum organized around dressing, feeding, and cleanliness. There are other factors, such as the development of adequate expressive language skills, which are more important in lessening the dependency of the individual upon others.

At this point it should be noted that the development of social competence as the guiding educational objective has not been stressed. Broadly construed, the development of individual and social competence is the objective of all educational programs. However, past history indicated that the social competence criterion as an organizing principal for curriculum has been construed too narrowly by teachers of the moderately mentally retarded. It has resulted in a curriculum which has degenerated into a program with long non-instructional recreational periods (i e., development of socialization skills?), and focused overly long on the development of self-help skills taught in such an artificial way as to preclude useful transfer.

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Goldstein, H. Report Number Two on Study Projects for Trainable Handicapped Children. Supt. of Public Instruction, Springfield, Ill. 1956.

Hottle, J. U. An Evaluation of Tennessee's Day Class Program for Severely Mentally Retarded Children. George Peabody College for Teachers, Nashville, 1958.

PHYSICAL EDUCATION FOR THE RETARDED CHILD

Dr. Robert Yoho, Director
Health Education
Indiana Board of Health

I should say in the beginning that the greatest assurance in speaking to a group comes when one selects the subject and feels he knows more about that subject than his audience. Now that condition is reversed at the moment. I am talking to experts in the field, and I can only ask for you to be sympathetic with someone who is interested in your work and has an appreciation for the job you are doing.

I would like to review with you some thoughts I have about mental retardation and some of the programs that may benefit the retarded child. There are two areas that are significant for all children, and they hold special significance for the educable, the trainable and all retarded children. These areas are health eudcation and physical education. For our purpose here today, I will refer to physical education, physical activity and recreation synonymously.

Yesterday, I heard your discussion on the purposes of the education program for the retarded pupil. I feel that these are the purposes we should have as we approach all people of all ages -- that is to make it possible for the individual, not the group, to live as independently and as comfortably as possible with the capabilities that he possesses.

Frequently, when I speak of independent living, I am referring primarily to the aged person. Our objectives for this particular group should be to encourage the highest degree of independent living and to delay the concept of complete dependency as far in the future as possible. So, the program directed toward the retarded child, in a sense, should be designed with this same purpose -- to improve the lives of individuals.

This has to be adapted to be applied to our special group. Before we can make these adaptations we must know something about the retarded individual. This may serve as a review for you, but I think that basically the retarded can adjust to a normal group in certain specific situations that are selective in which the retarded can function. We can pursue this idea further. One of our objectives is to determine these specifics and then prepare the child for adjustment to the normal group.

Again, I gleaned from your discussions that the retarded individual needs a functionally structured environment in which he may begin to learn his particular roles in the activities of daily living. I think it is well recognized that the retarded is somewhat deficient in self motivation and comprehension of the abstract.

Now, I will attempt to relate health and physical education to these thoughts. We must agree that it is important for the retarded person to have one or two buddies, to be in a group, disassociate himself and develop a wholesome concern for others. So it is this quality of the person that needs to be given consideration. Also, we will set standards as to what is pleasurable, and we tend to engage in and be active with the things that are comfortable and pleasurable. The retardate has his own standards of pleasurable situations. It is generally understood that the retarded and the normal individual will frequently interpret failure as rejection, i.e., rejection by other persons or by the group. According to available literature the retarded, in general, lack aggressiveness. This is somewhat contrary to my feelings. Many people share these sentiments that the retarded is an aggressive individual, but he may display degrees of passivity and withdrawal in response to the efforts of the parents and other authority figures to over correct his aggressiveness.

Considering that these are some of the characteristics of retardates, then certainly there must be some broad objectives for which we are striving and by which we can measure our achievements. I suppose that, categorically, we can list these objectives under social objectives and emotional objectives. I need not make further reference to the social objectives, such as to develop greater participation in group activities and to develop greater independence.

The objectives that fall in the emotional category are points that you try to reach as you engage in your ongoing programs. I would list in this area some things about improving the level of courage as over and against the lack of self confidence and aggressiveness. There would be a set of intellectual objectives for the program directed towards the mildly retarded. In this category I would stress the need to develop the communication skills of the retarded. This is an area in which physical education and recreation can make great contributions by helping the individual to express himself through non-verbal means of communication. Perhaps, non-verbal self-expression for normal and retarded individuals have been just as important goals of daily living as verbal expression.

Learning non-verbal expression through perceptual activities contributes to the total learning process. For example, no one can truly perceive how far a mile is until one has walked a mile. There is little or no meaning until you actually involve the physical activity into the learning process.

I have discussed briefly social objectives, emotional objectives, and intellectual objectives. The next category for your programs with the retarded is physical objectives. The one overall element of physical objectives for which you should strive is the accrument in general physical appearance and health.

Successful achievement in this area does not come through didactic types of learning, but it must come through activities and experiences that contribute to improved physical health and appearance. A part of this program would include good grooming and personal hygiene practices. Other important elements in this area would be to improve the basic motor skills and fundamental body movements.

In recent years knowledgeable people in the areas of physical education and special education have given their attention to development of materials which are helpful to those educators who are in the process of training the retarded. The publication from the University of Southern Illinois titled "Diversified Games and Activities of Rural Organizations for Mentally Retarded Children" is just one example of the kind of material that is available. I think the publication "Recreation and Physical Activity for the Mentally Retarded" would be informative and very helpful. The improvement of physical stamina, balance motor ability and muscular endurance which comes through a well-developed program of physical education is another important element for this subject.

I would like to stress this point: In the whole area of education for the normal and/or the retarded child the school administrator, the teacher, or the school board can no longer think of physical education and training as a nice thing to do if we have the time. Physical activity programs are as essential to education as any or all other subjects. This statement has been supported by numerous empirical studies and research findings. We know from medical research that physical activity is essential to life. The use of prescribed physical activity not only as a preventive to heart malfunctions but also as a treatment in heart disease is illustrative of this statement. One researcher suggested at the A. M. A. Convention in Atlantic City recently that if man engaged in rather strenuous physical activity for thirty minutes a day, five days a week, he could add five years to his life. I don't know that this can actually be proven or if anyone wishes to live five years longer, but I do emphasize that regular physical activity is essential to living a full life for all individuals.

Physical activity has more possible contribution to preparing the retarded individual for learning the necessary life skills than it does for normal persons.

From this viewpoint it is perhaps more beneficial to the retarded than the average individual.

I wish to talk now about the learning experiences for the retarded child in the field of health. I am confident, on the basis of what has been said, the available literature, and what material has been prepared especially for the retarded child, that this is a program that is generally neglected. No one has put any great effort in preparing health education material for use with retarded children. A few things are available but not nearly the amount that has been prepared in other areas. I suggest to you that the need for the retarded to have whatever information he can comprehend and act upon is extremely significant and should be included in a well-planned training program.

In conclusion let me make some suggestions as to what can be done and where there are sources of help.

I haven't dwelled too much on trying to sell you folks on the idea of including health education and physical education into the program. I haven't spent the time trying to convince you that this ought to be recognized in the guide because I have a feeling you feel the same way I do about the importance of these areas for the retarded. What do we need to do in order to make it possible for the teachers to work with the group of children we are talking about? What are some of the things we need to do in order to make it a little more practical for them to give the necessary attention to these two fields? I think it is deserved because of the benefits that can be derived. First of all, I think that it is possible within the State of Indiana for material to be prepared and published that will be useful and appropriate for use with retarded children in the field of health. And I think the subject matter could be covered in such a publication, or a series of publications which would deal with many of the same problems of normal children. It would deal with personal hygiene, sex education, the communicable diseases, including the venereal diseases, and nutrition. We have the financial resources within the State of Indiana, and, perhaps, the capabilities to develop these materials. And I wouldn't be surprised if there aren't federal funds someplace within the program in which you could develop a guide or materials for use with the group you are interested in. So, I think materials in health education, materials for teachers to use as it relates to physical education and recreation, and audio-visual materials could be made available to teachers around the state. I think consultation can be provided as groups attempt to develop programs in these areas. I would assure you, Mr. Brinegar and Mrs. Walker that the group I represent would be most willing to assist in any way possible with accomplishing this sort of thing. In fact, I know sources of funds that can be drawn on other than, let's say, Elementary and Secondary Education Act Funds or the 313 Funds.

Once again, you are aware of the major contributions of both physical education and health education in the training of the mildly retarded child. There is a great opportunity for Indiana to demonstrate some initiative and some imagination in developing programs in this area that can be out in the forefront of programs that are generally in operation throughout the nation. I believe that here in Indiana we have established the kind of working relationship between state and agencies in other fields that has resulted in the mutual respect so that the problem of cooperation and coordination to do the job can be done without the usual delays that are necessary when you attempt to involve all the people who should be involved for the first time. The Department of Mental Health, Department of Public Instruction, State Department of Public Welfare, and the State Board of Health have had considerable experience in working cooperatively in other fields. This experience in cooperation can be utilized to benefit development of the kinds of programs that you people want in this field for the retarded child.

In addition to the direct contribution of physical activity, physical education can be a vehicle for carrying many of the other learning experiences. One of the interesting things that you hear said is that man is at his best when he is playing or when he is doing what he wants to do; through a physical activity and recreational setting, many individuals may be able to function more effectively because he is at his best at this point. By the way, one of the real interesting pieces of material, which I believe you would agree is well done, came from one of the issues of the Journal of the Americal Association for Health, Physical Education and Recreation. It is called "Activity Programs for the Mentally Retarded - Contributions to the Theory and Practice of Providing Vigorous Physical Activity". The potential of a variety of physical activities for the mentally retarded child in extending the mind through the body is discussed, together with what research says about the psychomotor functions of the retarded. This is a symposium of articles and I would suspect that the authors, because of the positions they have, might be respected by you as authorities in the field.

APPENDIX I

CLASSROOM FACILITIES FOR TRAINABLE MENTALLY RETARDED CHILDREN

The physical characteristics of classrooms for trainable mentally retarded children are not typical of classrooms being used for general educational purposes. Even though it is recommended that the enrollment should not exceed thirteen pupils, the fact that the room is almost totally self-contained requires it to be a large one. Whether the room is located in a school building or in a separate facility, approximately 900 square feet of floor space is recommended. Since a number of trainable mentally retarded children may have additional handicaps which require wheelchairs or prosthetic devices, the classroom should have wide doorways, ramps from one floor level to another, and a minimum of stairways.

A sink, a cooking unit, a refrigerator, and ample counter-top space are necessary equipment since a vital part of the educational program is centered around preparation and serving food during lunch period activities. In addition, there should be an abundance of storage space for the large variety of equipment not ordinarily found in a classroom. Toys, dishes, simple housekeeping devices, craft materials, audio-visual equipment, and the usual amount of instructional supplies are recommended.

Separate toilet facilities for boys and girls should be included in each unit in order that each child be helped in the development of habits of attending to personal needs, cleanliness, neatness, and grooming.

The classroom should be attractively decorated with good illumination and should have better than average sound-proofing. The room should have more bulletin than blackboard space, but the amount of each can be less than that needed in a class for educable mentally retarded children.

APPENDIX II

AGENCIES DEALING WITH RETARDED CHILDREN: ROLES AND FUNCTIONS

SOURCES OF FUNDING

1. Cigarette Tax

In 1965, the Indiana General Assembly earmarked part of the cigarette tax fund for state matching funds for construction of comprehensive mental retardation and mental health centers. Over $2 million was available to match federal and local funds for construction.

In 1967, legislation was passed to earmark 1/12 of the cigarette tax received by the General Fund for matching funds for construction and/or operation of these centers. Approximately $3.3 million will be available in the 1967-69 biennium. One-sixth of the cigarette tax revenue from the General Fund will be available after 1969 and will provide around $6.7 million.

For more information write to Robert W. Spaulding, Director, Division on Mental Retardation, 1315 West 10th Street, Indianapolis, Indiana.

2. County Tax

In 1963, legislation was passed to enable counties to assess themselves up to 2¢ on $100 property valuation to support centers for the mentally retarded. The County Commissioners should be initially contacted early in the Spring. After receiving their approval, the budget should be presented to the County Council for approval. The request can be approved at the Fall Budget Hearing, held the first Tuesday after Labor Day. If the County Council approves the request, then the County Tax Adjustment Board must give final approval for inclusion in the county budget.

In 1965, another piece of enabling legislation was passed to allow counties to assess themselves up to 10¢ on $100 property valuation to match state and federal funds available for comprehensive mental retardation and mental health centers. These funds can be used for either operation and/or construction.

Program approval must be obtained from the Indiana Department of Mental Health. Procedure for applying for county funds is outlined in a special bulletin available from the Indiana Association for Retarded Children, Inc.

3. Indiana Department of Mental Health

Robert Spaulding, Director
Division of Mental Retardation
1315 West 10th Street
Indianapolis, Indiana 46207
Phone: (317) 634-8401

Funds can be made available to local ARC associations to establish new programs or expand existing programs for the mentally retarded. Presently there is $890,000 available for the 1967-69 biennium. Application for funds should be made before June 1st of each year.

4. Indiana Department of Public Instruction

Leslie Brinegar, Director
Division of Special Education
401 - State House
Indianapolis, Indiana 46204
Phone: (317) 633-4912

Rule S-1 of the Rules and Regulations of the Commission on General Education, under which the state-wide program for special education operates, makes it possible for the state to provide reimbursement to local school corporations for certain services: 50% for the services of licensed teachers and psychologists and 80% of approved costs for special transportation. At the present time, reimbursement is averaging 25% for teachers' salaries and psychological services, and up to $2.00 per day per child for special transportation.

Gayle S. Eads, Director
Division of Vocational Rehabilitation
1028 Illinois Building
17 West Market Street
Indianapolis, Indiana 46204
Phone: (317) 633-6942

Funds are available to purchase services from local ARC associations operating sheltered workshop programs. Up to $30.00 per week is available for trainees. Funds are also available for staff or equipment. Consideration of a similar plan is being given by the Division of Special Education to be implemented at some future date.

Cyrus Gunn, Director
Federal Projects Division
Old Trails Building
309 West Washington Street
Indianapolis, Indiana 46204
Phone: (317) 633-4223

Public Law 89-313, an extension to Title I of Public Law 89-10, the Elementary-Secondary Education Act of 1965, extends benefits to children who are at a disadvantage in school because of handicapping conditions and whose education is the direct responsibility of state rather than local agencies. State agencies, such as departments of education, health, mental health, mental hygiene and welfare, are eligible to participate under this amendment if they are directly responsible for providing free public education for handicapped children.

Under provisions of this act, there is one hundred percent funding. A grant which an agency is eligible to receive for a fiscal year is based on the average daily attendance of the handicapped children who are supported by the agency. Projects submitted for approval must be designed to meet the special educational needs of handicapped children and to extend and to improve educational services to them. The acquisition of equipment may be included. Remodeling and construction of school facilities which can be demonstrated to be essential in order to insure the success of a project may be included for schools owned by the state or a public agency of the state.

5. Indiana State Board of Health

Robert Rogers, Director
Division on Hospital and Institutional Services
1330 West Michigan Street
Indianapolis, Indiana
Phone: (317) 633-6280

In 1963, the 88th Congress signed into law P. L. 88-164, which authorized financial assistance for construction of community mental retardation facilities and mental health centers. Approximately $1.3 million for mental retardation construction is available through 1968.

6. United Community Efforts

United Fund - Many local associations for retarded children receive funds from the local United Fund. Application for membership should be made in the Spring, or before the actual goal is set for the Fall Campaign. Contact your local United Fund executive director for information.

Fund Drives - Local associations for retarded children can run an organized fund drive, provided they are not members of the United Fund, or receive approval to do so from the United Fund if they are members. Special events such as dances, carnivals, rummage sales, etc. will help to raise funds for operation, so long as it does not conflict with their United Fund affiliation.

Organizational Contributions - Many social and service clubs are willing to provide financial assistance to local associations. Most organizations like to earmark the money for equipment, scholarships, summer camping programs, or other direct services.

Tuition - Most local associations charge tuition for retarded individuals in their program. This may be done on the ability to pay factor and no child should be excluded because the parents cannot pay.

CONSULTATIVE SERVICES AND RESOURCE PERSONNEL

1. American Association on Mental Deficiency

   Executive Secretary
   1601 West Broad Street
   Columbus, Ohio

2. Ball State University

   Dr. Elizabeth Spencer, Chairman
   Department of Special Education
   217 English Building
   Muncie, Indiana
   Phone: (317) 285-4534

3. Council for Exceptional Children

   Executive Secretary
   1201 Sixteenth Street, N. W.
   Washington, D. C.

4. Indiana Association for Retarded Children, Inc.

   Frank Ball, Executive Director
   752 East Market Street
   Indianapolis, Indiana 46202
   Phone (317) 632-4387

5. Indiana Department of Mental Health

   Robert Spaulding, Director
   Division on Mental Retardation
   1315 West 10th Street
   Indianapolis, Indiana 46207
   Phone: (317) 634-8401

6. Indiana Department of Public Instruction

   Leslie Brinegar, Director
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   Room 401 - State House
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   Phone: (317) 633-4912

   Lon C. Woods, Supervisor
   Programs for the Mentally Retarded
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   Gayle S. Eads, Director
   Division of Vocational Rehabilitation
   1028 Illinois Building
   17 West Market Street
   Indianapolis, Indiana
   Phone: (317) 633-6942

7. Indiana Mental Health and Mental Retardation Planning Commission

Don Beeler, Director
Mental Retardation Planning
LaRue Carter Hospital
1100 West 10th Street
Indianapolis, Indiana
Phone: (317) 634-8401

8. Indiana Park & Recreation Association

Ill & Handicapped Section
P. O. Box 41115
Indianapolis, Indiana 46241

9. Indiana State University

Dr. Rutherford B. Porter, Chairman
Special Education Clinic
ISU Laboratory School
Terre Haute, Indiana
Phone: (812) 232-6311

10. Indiana University

Dr. Howard Spicker, Chairman
Department of Special Education
216 School of Education
Bloomington, Indiana 47401
Phone: (812) 337-8579

11. National Association for Retarded Children

Executive Director
420 Lexington Avenue
New York, New York 10017
Phone: (212) 689-9290

12. Purdue University

Dr. Earl Heath, Chairman
Special Education Department
West Lafayette, Indiana
Phone: (317) 92-2232

13. St. Francis College

Louis F. Ross, Chairman
Special Education Department
Fort Wayne, Indiana
Phone: (219) 742-1106 Ext. 22

14. St. Mary's College

Ruth Fielder, Director
Special Education Department
Notre Dame, Indiana
Phone: (219) 232-3381

INSTRUCTIONAL TEACHING MATERIALS

1. Childplay of New York, Inc.
43 East 19th Street
New York, New York 10003

This company specialized in materials and equipment for early childhood education, group work, recreation and therapy. Catalog costs $1.00.

2. Children's Music Center, Inc.
5373 West Pico Boulevard
Los Angeles, California

A catalog describing records, books and rhythm instruments for exceptional children is available free of charge.

3. Community Playthings
Dept. 44
Rifton, New York 12471

Community Playthings has produced a variety of equipment designed for use with mentally retarded and physically handicapped children. Free copies of their brochure and catalog are available.

4. Concept Records
P. O. Box 524
North Bellmore, New York

A free pamphlet listing titles and prices for basic songs for exceptional children is available.

5. Creative Playthings, Inc.
Order Office
Princeton, New Jersey 08512

A source of equipment and teaching aids, including playground equipment, indoor games and classroom posters. This company also has catalogs for parents use.

6. Educational Activities, Inc.
P. O. Box 392
Freeport, New York 11520

This company specializes in activity records for physical education, special education and early childhood education.

7. The John Day Company
School and Library Department
200 Madison Avenue
New York, New York 10016

This company periodically issues a brochure describing publications available for classroom use, particularly for teachers in the field and in training, professional workers, parents and laymen.

8. Information Center Recreation for the Handicapped

Bert Lunan, Editor and Coordinator
Little Grassy Facilities
Southern Illinois University
Carbondale, Illinois 62901

This center publishes a free newsletter monthly which contains articles of particular interest to teachers of trainable mentally retarded children.

9. Special Education Instructional Materials Center

Dr. James J. McCarthy, Director
University of Wisconsin
2570 University Avenue
Madison, Wisconsin 53706

This center not only collects and loans Special Education Materials, but attempts to evaluate such materials.

10. USOE/MSU Regional Instructional Materials Center for Handicapped Children and Youth

Mrs. Lou Alonso, Director
Michigan State University
216 Erickson Hall
East Lansing, Michigan 48823

William McKinney
Indiana Field Consultant
Division of Special Education
Room 401 - State House
Indianapolis, Indiana 46204
Phone: (317) 633-4912

This center is designed to provide a network of services to educators of handicapped children in Indiana, Ohio and Michigan. This agency serves as a base for activities and services including the collection, evaluation, production and loan of instructional materials. Each of the three states has a field consultant to work directly with teachers and administrators.

PROGRAM DESCRIPTIONS

1. Aux Chandelles

William Anderson, Program Director
100 West Hively Avenue
Elkhart, Indiana 46514
Phone: (219) 522-1580

2. Children's Memorial Activity Center

602 Howard Avenue
Rockville, Indiana 47872
Phone: (812) 569-5128

3. Evansville Association for Retarded Children, Inc.

A-1 Building
2029 Washington Avenue
Evansville, Indiana
Phone: (812) 476-4836

4. Indiana Association for Retarded Children, Inc.

Frank Ball, Executive Director
752 East Market Street
Indianapolis, Indiana 46202
Phone: (317) 632-4387

5. Johnny Appleseed School and Training Center for Retarded Children

James Austin
2542 Thompson Avenue
Fort Wayne, Indiana 46807
Phone: (219) 744-3325

6. Logan School for the Retarded

228 East Colfax Avenue
South Bend, Indiana 46615
Phone: (219) 289-4831

7. Marion County Association for Retarded Children, Inc.

1721 Cherington Court
Indianapolis, Indiana 46227
Phone: (317) 881-8425

8. National Association for Retarded Children

Executive Director
420 Lexington Avenue
New York, New York 10017
Phone: (212) 689-9290

9. Stonebelt Center - Headley School

Mrs. Joan Burton, Teacher
1620 Matlock Road
Bloomington, Indiana 47401
Phone: (812) 332-3720

APPENDIX III

SELECTED ANNOTATED BIBLIOGRAPHY FOR TEACHERS OF THE TRAINABLE MENTALLY RETARDED

I. Working with Parents

Baumgartner, Bernice, *Helping the Trainable Mentally Retarded Child*, Teachers College, Columbia University, New York, 1950.

Introduced as a handbook for teachers, parents and administrators, this is one of the few books available that are exclusively concerned with education of the trainable mentally retarded. It is rather superficial and adds little to that covered in Rosenzweig or Perry. The bibliography provides many references in pre-school child development.

Blodgett, Harriett and Warfield, Grace, *Understanding Mentally Retarded Children*, Appleton-Century-Crofts, Inc., New York, 1959.

Of special interest are the sections of this book dealing with approaches to work with parents of retarded children as it was carried out at Sheltering Arms in Minneapolis.

Dittman, Laura L., *The Mentally Retarded Child at Home, A Manual for Parents*, National Association for Retarded children, New York.

Practical advice on home training and daily care from infancy to adolescence.

Fraiberg, Selma, *The Magic Years*, Charles Scribner's Sons, New York, 1959.

The emotional growth of the child from birth to six is explored in order to help parents understand and handle the resulting problems. The author presents the subject with a good deal of humor and provides, by example, much insight for the professional person as to how he might be helpful to parents. The interdependence between the intellectual and emotional growth of young children is stressed and the implications for understanding and working with the trainable child are numerous.

French, Edward and Scott, J. Clifford, *Child in the Shadows*, Lippincott, New York, 1960.

Addressed to parents and others, the authors objectively cover the subject of mental retardation in non-technical terms. A positive approach to residential placement is stressed--at least in terms of number of pages dealing with it.

Levinson, Abraham, *The Mentally Retarded Child: A Guide for Parents*, The John Day Company, New York, 1965.

This book has been revised and completely brought up to date by the staff of the Levinson Foundation.

Lewis, Richard, Strauss, Alfred and Lehtinen, Laura, *The Other Child*, Grune and Stratton, New York, 1960.

Written for parents, this book specifically pertains to the Strauss syndrome child. The clarity and lack of emotional overtone makes it one of the better books written in part by a parent for parents.

Molloy, Julia S., *Teaching the Retarded Child to Talk: A Guide for Parents and Teachers*, The John Day Company, New York.

This book's purpose is to help parents and teachers of very young retarded children who have not yet started to talk or who talk poorly.

Spock, Benjamin and Lerrigo, M. C., *Caring for Your Disabled Child*, Macmilliam Co., New York, 1965.

Co-authored by the well-known authority on childhood development, this book is written to appeal to parents.

II. Objectives

Davies, Stanley and Ecob, Katherine, *The Mentally Retarded in Society*, Columbia University Press, New York, 1959.

The social aspects of mental retardation are presented. The author's stated intention is to trace, through the history of methods of care, the development of modern concepts.

Dunn, Lloyd, *Exceptional Children in the Schools*, Holt, Rinehart, and Winston, New York, 1963.

A recent publication dealing with the exceptional child which presents a chapter on the trainable mentally retarded. There is a rather thorough coverage of definition; prevalence; identification; classification and characteristics; school programs and community, occupational and family adjustments.

Fraenkel, William A., *Fundamentals in Organizing a Sheltered Workshop for the Mentally Retarded*, National Association for Retarded Children, New York.

This pamphlet outlines the necessary ingredients for a sheltered workshop, including staff and equipment needs. Guidelines, sample floor plans, and a bibliography are included.

Freedman, Sidney, "School Camping", *Camping Magazine*, 1950; 32-34.

The reported school camping experience provided for young trainable mentally retarded children is described in terms of observable benefits to children and their parents. School camping is concluded to be a feasible enrichment to the school program for the trainable mentally retarded.

Gesell, Arnold, *The First Five Years of Life*, Harper and Brothers, New York, 1940.

A valuable reference when constructing a sequential approach to teaching the trainable mentally retarded. Of special help are the gradations of mental growth which are organized under motor development, adaptive behavior, language development and personal-social behavior.

Gesell, Arnold and Ilg, Frances, *The Child From Five to Ten*, Harper and Brothers, New York, 1946.

An over-all view of the total span of growth from five to ten years is presented followed by a detailed breakdown of the behaviors as they develop from one year to the next. A useful reference in constructing a sequential program for the trainable mentally retarded if used selectively.

Gould, Kay and Gingland, Davis, *Day Camping for the Mentally Retarded*, National Association for Retarded Children, New York.

This handbook deals with the organization and operation of a day camp for retarded children, and how the day camp works with the home and community.

Hunt, Valerie V., *Recreation for the Handicapped*, Ronald Press, Englewood Cliffs, N. J., 1953.

Implications for recreation in meeting the needs and interests of the retarded including suggested activities for various age groups.

Perry, Natalie, *Teaching the Mentally Retarded Child*, Columbia University Press, New York, 1960.

Although the least weel documented, this is perhaps the most helpful of the books available which exclusively involve education of the trainable mentally retarded. The curriculum is organized into beginner, intermediate and advanced skills in each of the following areas: physical development, self-care, self-expression, music, language, understanding the environment, crafts, work and group projects. Chapters on school-community relationships, home-school relationships and the teacher of the trainable child as well as an appendix of forms, schedules, materials, books, etc., are included.

President's Panel on Mental Retardation, *A Proposed Program for National Action to Combat Mental Retardation*, U. S. Government Printing Office, Washington, D. C., 1962.

Following an introduction to the problem, the recommendations of the President's Panel are presented.

Radler and Kephart, *Success Through Play*, Harper and Brothers, New York, 1960.

Considerations for the development of motor skills as well as body image concept provide a useful reference in the construction of a sequential program for the trainable mentally retarded.

Stein, Julian U., "A Practical Guide to Adapted Physical Education for the Educable Mentally Handicapped." *Journal of Health, Physical Education, Recreation*, December, 1962.

Curriculum guidelines, activities, teaching hints, and suggestions are outlined and discussed in detail for the organizing, conducting, administering, and supervising a physical education program and practices that have been successfully used over a period of several years.

Vocational Education and Extension Board of Nassau County, *Westbury Curriculum for Primary Trainable Children*, Mineola, New York.

This useful reference for classroom planning is based upon the theory that development of the body image concept is the essential first step in the educational program for the trainable mentally retarded child.

III. Methodology

Beasley, Jane, *Slow to Talk*, Bureau of Publications, Teachers College, Columbia University, New York, 1956.

Written as a guide for teachers and parents of children with delayed language development, the content is especially helpful for the teacher of the preadolescent trainable mentally retarded. Language origins and development are related to the learning situation at home and school.

Black, D. and Motter, Bonnie, *Supplementary Booklet for the Instructional Film on the Mentally Retarded and Movement in Physical Education*, Bowling Green State University, Mimeo., 1966.

This is an interesting attempt to develop an adaptive physical education program for mentally retarded children.

Brown, Richard, *Swimming for the Mentally Retarded*, National Association for Retarded Children, New York, 1959.

A progress record of swimming skills· teaching suggestions; and the specific value of a swimming program are included in this manual prepared in cooperation with the American National Red Cross.

Carlson, Bernice Wells, and Gingland, David R., *Play Activities for the Retarded Child*, Abingdon Press, Nashville, Tennessee, 1961.

A guide for parents and teachers, the experienced or the inexperienced in conducting play and recreational activities for the retarded. Sections include specific play activities in these categories: games, crafts, musical activities, and informal and imaginative play. The needs and special problems of the retarded are discussed.

Fenton, Joseph, A Curriculum Focus for the Child with Cerebral Palsy and Mental Retardation, United Cerebral Palsy, New York, 1960.

Illustrations of the use of activities or experiences as sources of meaningful sensory experiences are provided in Appendix B. This is a useful approach with the trainable child. The teacher will be able to expand upon the suggestions given and relate them to the needs of the specific group. The remainder of the booklet, although dealing with the cerebral palsy education child, will also be helpful if used selectively.

Hudson, Margaret, Procedures for Teaching Trainable Children, Council for Exceptional Children Research Monograph: Series A., No. 2, Wasghinton, D. C., 1960.

This report of an exploratory study provides some specific information about the "how" of teaching as illustrated by teaching techniques used and the "what" of teaching as seen in the types of lessons being taught in public school classes for the trainable mentally retarded in Tennessee. Included was an attempt to rank teachers and the resultant Teacher Competency Checklist. Although no conclusions can be drawn from this type of study, the author asks several important questions.

Itard, Jean-Marc-Gaspard, The Wild Boy of Averyon, Appleton-Century-Crofts, New York, 1962.

An account of the first recorded educational procedure used with a severely retarded boy is presented in detail and continues to be of importance to teachers today.

Molloy, Julia S., Trainable Children--Curriculum and Procedures, The John Day Company, New York, 1963.

A collection of fairly unrelated chapters have been brought together in this manual concerned with the "how to do it" of a specific community sponsored school for the trainable. As described, this program provides a minimum of experience for trainable youngsters in developing social competency.

Robins, Ferris, and Robins, Jennet, Educational Rhythmics for Mentally Handicapped Children, Horizon Press, New York, 1965

This book presents the approach of a group in Switzerland in using fundamental rhythms in dealing with the retarded. The book is well illustrated, and explanations of the various movements are well described. Activities are progressive in moving from the simple to the more difficult. Activities are of type known as movement exploration in this country.

Schlotter, Bertha, and Svendsen, Margaret, An Experiment in Recreation with the Mentally Retarded, Revised Edition, State Department of Public Welfare, Springfield, Illinois, 1951.

This describes an experiment in recreation programming at the Lincoln State School and Colony. Detailed analysis and discussion are given to organization of the program, participants' response to activities, play equipment and facilities used. Activities are indexed in five ways; alphabetical, complexity, motor activity, equipment, social interaction. Much emphasis is placed upon the importance of mental age in selecting activities for the recreation program for the retarded.

IV. Evaluation

Burgemeister, Bessie B., Blum, Lucille H., and Lorge, Irving, *Columbia Mental Maturity Scale*, *Revised Edition*, Harcourt, Brace, and World, Inc., New York, 1959.

Designed to measure intelligence of handicapped children, this pictorial type classification test calls for no verbal response and a minimum of motor response. The test, an untimed individual type scale, utilizes perceptive discriminations involving color, shape, size, use, number, kind, missing parts, and symbolic material.

Cain, Leo and Levine, Samuel, *Cain-Levine Social Competency Scale*, Consulting Psychologists Press, Inc., Palo Alto, California, 1963.

This instrument measures self-help, social initiative, and communication skills. The rating scale is based upon information obtained from parents.

Doll, Edgar, *Vineland Social Maturity Scale*, Educational Test Bureau, Philadelphia, Pennsylvania, 1946.

This instrument consists of items designed to measure social competence graded from birth to adulthood and may be used for reference in constructing a sequential program for the trainable mentally retarded.

Dunn, Lloyd M., Peabody Picture Vocabulary Test, American Guidance Services, Inc. Minneapolis, Minnesota, 1959.

The PPVT is an untimed individual test, administered in fifteen minutes or less, consisting of a booklet with three practice and 150 test plates, each with four numbered pictures. Items are arranged in ascending order of difficulty, and the subject responds only to the items between his "basal" and his "ceiling".

Goodenough, Florence L., Maurer, Katherine M., and Van Wagenen, M. J., *Minnesota Pre-School Scale*, Educational Test Bureau, Philadelphia, Pennsylvania, 1940.

Although nearly thirty years old, this scale still has utility with preschool age children. The disadvantages of this scale lie in the limited age range of usefulness, and in the lack of appeal to the young child because the test materials are not interesting and the procedures are too inflexible.

Leiter, Russell Graydon and Arthur, Grace, *Leiter International Performance Scale*, C. H. Stoelting Co., Chicago, Illinois, 1955.

The Arthur adaptation of the Leiter International Performance Scale, a non-verbal scale for young children, is a point scale which yields both an M. A. and an I. Q. It is especially useful for the testing of children with speech and hearing difficulties, mental retardates, foreignborn or bilingual children, and shy or withdrawn children.

Rosenzweig, Louis and Stoddard, Hilda, Behavior Rating Scale, Vocational Education and Extension Board of Nassau County, Mineola, New York.

This scale, which includes self-help, social, motor, academic, and vocational skills for the trainable mentally retarded, is a useful reference for the construction and evaluation of a sequential program.

Terman, Lewis and Merrill, Maud, Stanford-Binet Intelligence Scale, Form L-M, Houghton Mifflin Co., Boston, Massachusetts, 1960.

This instrument is an age scale and seems to be more desirable for young children. The resulting scores are a mental age and an I. Q.

Wechsler, David, Wechsler Intelligence Scale for Children, Psychological Corporation, New York, 1949.

This instrument is one of the most popular for testing school age children. The WISC does not render a mental age, but rather gives a Verbal I. Q., a Performance I. Q., and a Full Scale I. Q.

Wechsler, David, Wechsler Adult Intelligence Scale, Psychological Corporation, New York, 1955.

This scale is designed to measure intelligence of persons above sixteen years of age. Like the WISC, it renders a Verbal I. Q., a Performance I. Q., and a Full Scale I. Q.

Woodworth, R. S., and Wells, F. L., Merrill-Palmer Scale of Mental Tests, Harcourt, Brace, and World, Inc., New York, 1931.

This instrument was constructed to serve as a substitute for, or supplement to, revisions of the Binet Scale. Its greatest utility lies with pre-school aged children.

V. General

Francis, Robert J. and Rarrick, G. L., Motor Characteristics of the Mentally Retarded, U. S. Department of Health, Education and Welfare, Washington, D. C., 1960.

This should be particularly beneficial to those who have not been trained in special education.

Hunt, J. McV., Intelligence and Experience, The Ronald Press Company, New York, 1961.

A large portion of this book presents a rather clear picture of Piaget's work on periods of intellectual development. In general, it defends the position of intelligence as a central structure developing as a result of child-environment interaction. An easily read yet comprehensive handling of historic and current thought on the subject on intelligence.

Kephart, Newell C., The Slow Learner in the Classroom, Charles E. Merrill Books, Inc., Columbus, Ohio, 1960.

Two chapters, "Motor Bases of Achievement" and "Sensory Motor Training" are particularly good. The former deals with the muscular basis of behavior, posture, laterality, directionality, and body image. The latter deals with specific activities (walking board, balance board, trampoline, stunts, games, and rhythms).